Results of the IMO Video Meteor Network – June 2011

Sirko Molau, Abenstalstr. 13b, 84072 Seysdorf *2011/08/18*

1. Observers

Code	Name	Place	Camera	FOV $[^{\circ 2}]$	St.LM [mag]	Eff.CA $[km^2]$	Nights	Time [h]	Tot. CA $[10^3 km^2 h]$	Meteors
BERER	Berko	Ludanyhalaszi/HU	HULUD1 (0.95/3)	2256	4.8	1540	23	80.3	92.0	286
			HULUD2 (0.75/6)	4860	3.9	1103	22	73.5	69.7	155
			HULUD3 (0.75/6)	4661	3.9	1052	19	65.9	47.8	127
BREMA	Breukers	Hengelo/NL	MBB3(0.75/6)	2399	4.2	699	12	31.7	34.3	102
BRIBE	Brinkmann	Herne/DE	HERMINE (0.8/6)	2374	4.2	678	11	32.8	17.3	95
		Berg. Gladbach/DE	KLEMOI (0.8/6)	2286	4.6	1080	16	47.2	32.6	133
CASFL	Castellani	Monte Baldo/IT	BMH1 (0.8/6)	2350	-	-	17	54.7	-	157
			BMH2 (1.5/4.5)*	4243	-	-	20	49.1	-	141
CRIST	Crivello	Valbrevenna/IT	C3P8 (0.8/3.8)	5455	4.2	1586	22	100.1	105.2	273
			STG38 (0.8/3.8)	5614	4.4	2007	22	97.4	163.2	422
CSISZ	Csizmadia	Zalaegerszeg/HU	HUVCSE01 (0.95/5)	2423	3.4	361	14	33.7	7.2	77
CURMA	Currie	Grove/UK	MIC4 (0.8/6)	2411	5.2	2373	17	40.9	-	116
ELTMA	Eltri	Venezia/IT	MET38 (0.8/3.8)	5631	4.3	2151	14	57.2	-	162
GONRU	Goncalves	Tomar/PT	TEMPLAR1 (0.8/6)*	2179	5.3	1842	25	142.1	189.8	540
			TEMPLAR2 (0.8/6)*	2080	5.0	1508	27	122.0	153.6	339
GOVMI	Govedic	Sredisce ob Dr./SI	ORION2 (0.8/8)	1447	5.5	1841	17	50.3	-	144
HERCA	Hergenrother	Tucson/US	SALSA3 (1.2/4)*	2198	4.6	894	29	185.8	-	398
HINWO	Hinz	Brannenburg/DE	AKM2 (0.85/25)*	767	5.7	1101	12	29.1	-	76
IGAAN	Igaz	Baja/HU	HUBAJ (0.8/3.8)	5552	2.8	403	28	73.3	29.7	213
		Hodmezovasar./HU	HUHOD (0.8/3.8)	5502	3.4	764	25	65.4	49.3	191
		Budapest/HU	HUPOL (1.2/4)	3790	3.3	475	18	26.8	8.4	55
		Sopron/HU	HUSOP (0.8/6)	2031	3.8	460	21	42.9	14.4	120
JONKA	Jonas	Budapest/HU	HUSOR (0.95/4)	2286	3.9	445	14	53.5	-	133
KACJA	Kac	Kostanjevec/SI	METKA (0.8/8)*	1372	4.0	361	4	11.5	4.8	27
		Ljubljana/SI	ORION1 (0.8/8)	1402	3.8	331	19	83.8	-	133
		Kamnik/SI	REZIKA (0.8/6)	2270	4.4	840	17	80.4	-	357
			STEFKA (0.8/3.8)	5471	2.8	379	17	77.6	20.5	216
KERST	Kerr	Glenlee/AU	GOCAM1 (0.8/3.8)	5189	4.6	2550	21	213.6	356.4	1416
MOLSI	Molau	Seysdorf/DE	AVIS2 (1.4/50)*	1776	6.1	3817	4	18.4	54.1	167
			MINCAM1 (0.8/8)	1477	4.9	1084	21	68.2	-	227
		Ketzür/DE	REMO1 (0.8/3.8)	5600	3.0	486	21	62.9	-	76
			REMO2 (0.8/3.8)	5613	4.0	1186	23	72.8	48.8	157
OTTMI	Otte	Pearl City/US	ORIE1 (1.4/5.7)	3837	3.8	460	17	51.4	-	160
PERZS	Perko	Becsehely/HU	HUBEC (0.8/3.8)*	5498	2.9	460	27	85.9	37.1	302
ROTEC	Rothenberg	Berlin/DE	ARMEFA (0.8/6)	2366	4.5	911	14	49.6	52.5	109
SARAN	Saraiva	Carnaxide/PT	RO1 (0.75/6)	2362	3.7	381	16	47.8	-	119
			RO2 (0.75/6)	2381	3.8	459	20	60.9	43.7	185
SCHHA	Schremmer	Niederkrüchten/DE	DORAEMON (0.8/3.8)	4900	3.0	409	21	44.0	-	116
SLAST	Slavec	Ljubljana/SI	KAYAK1 (1.8/28)	588	-	-	11	29.9	117.5	122
STOEN	Stomeo	Scorze/IT	MIN38 (0.8/3.8)	5566	4.8	3270	21	71.0	149.9	315
			NOA38 (0.8/3.8)	5609	4.2	1911	20	66.2	135.0	240
			SCO38 (0.8/3.8)	5598	4.8	3306	19	71.4	-	335
STRJO	Strunk	Herford/DE	MINCAM2 (0.8/6)	2362	4.6	1152	10	18.7	24.4	48
			MINCAM3 (0.8/12)	728	5.7	975	17	25.6	-	68
			MINCAM5 (0.8/6)	2349	5.0	1896	15	32.4	50.5	116
TEPIS	Tepliczky	Budapest/HU	HUMOB (0.8/6)	2388	4.8	1607	23	79.0	-	281
TRIMI	Triglav	Velenje/SI	SRAKA (0.8/6)*	2222	-	-	23	63.3	-	175
ZELZO	Zelko	Budapest/HU	HUVCSE02 (0.95/5)	1606	3.8	390	18	64.3	30.2	147
Sum							30	3106.3	-	10069

* active field of view smaller than video frame

2. Observing Times (h)

June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
BERER	4.6	1.5	2.0	2.3	4.4	0.8	3.3	1.1	-	-	-	5.7	-	5.0	5.5
	1.5	2.9	0.3	2.8	2.3	2.4	1.2	-	-	-	-	4.1	-	5.1	5.7
	2.6	1.6	-	1.2	2.1	-	5.8	1.1	-	-	-	2.4	-	5.7	0.9
BREMA	4.8	3.0	3.6	2.7	-	-	-	2.2	2.1	-	4.0	-	-	-	-
BRIBE	5.5	5.4	4.7	-	1.6	-	-	-	-	-	-	-	-	-	-
	5.6	4.1	4.9	-	-	-	-	4.2	2.0	-	-	-	0.3	3.3	0.5
CASFL	0.3	-	-	-	-	6.7	-	0.7	-	1.0	-	-	4.9	5.3	-
	0.6	-	-	2.5	-	2.6	-	1.2	-	2.5	0.3	-	2.4	2.9	-
CRIST	-	4.4	3.8	-	-	1.8	-	-	3.0	0.5	-	-	3.3	6.2	5.5

	0.5	4.8	3.2	0.5	1.5	3.6	-	-	-	-	-	-	-	-	6.2
CSISZ	0.3	-	1.6	-	-	-	-	-	-	3.4	2.9	0.7	-	-	-
CURMA	2.0	2.3	-	-	-	1.3	3.3	3.3	1.1	-	4.6	-	3.3	-	-
ELTMA	-	-	-	-	-	-	-	-	-	-	-	5.6	-	5.0	6.3
GONRU	7.1	7.1	7.1	6.1	-	-	7.1	-	-	6.9	3.2	1.2	5.8	6.8	1.9
	7.1	7.2	7.1	4.0	-	-	4.3	3.7	4.4	4.4	4.9	2.0	1.5	4.0	0.3
GOVMI	-	2.0	4.4	-	-	2.2	1.0	-	-	-	2.6	1.7	1.2	-	5.8
HERCA	2.0	3.3	7.7	7.0	-	7.9	7.9	7.9	7.9	7.9	7.9	7.7	7.9	7.8	7.8
HINWO	-	-	4.6	3.0	2.6	2.0	2.4	-	-	-	-	1.9	-	-	0.8
IGAAN	1.5	1.7	0.3	0.8	1.1	-	0.5	2.1	1.9	1.7	2.1	4.9	0.7	3.0	6.1
	3.1	0.6	0.6	5.0	0.9	1.2	2.1	1.8	1.3	-	-	2.1	2.7	-	4.6
	-	1.9	0.3	-	2.5	-	0.3	-	-	2.2	0.7	1.7	1.2	3.0	0.6
	0.7	-	1.7	2.3	0.8	0.3	-	-	0.3	4.2	3.8	3.3	0.3	1.6	5.8
JONKA	-	-	-	-	-	-	-	-	-	-	-	4.0	2.5	4.2	2.4
KACJA	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-
	-	5.1	-	-	-	1.9	-	-	-	-	2.9	3.9	-	3.1	6.0
	-	2.7	-	-	-	3.1	-	1.2	-	1.1	-	-	-	4.3	6.1
	-	2.0	-	-	-	1.0	-	1.9	-	1.2	-	-	-	3.5	6.1
KERST	-	-	-	-	7.8	10.9	10.9	10.9	-	-	-	-	10.8	8.8	9.9
MOLSI	-	-	4.7	4.8	-	-	-	-	-	-	-	-	-	-	-
	-	-	3.6	5.8	3.1	1.2	4.5	-	-	5.7	-	3.3	1.6	1.1	1.3
	4.8	4.7	4.7	4.6	2.0	0.9	4.5	1.4	0.3	-	4.4	-	3.1	0.8	-
	4.7	4.7	4.7	4.6	4.5	0.6	4.5	1.4	-	-	4.3	1.9	2.0	4.2	-
OTTMI	3.7	2.5	4.2	2.1	2.5	1.4	3.6	-	-	-	3.9	2.1	1.4	-	-
PERCZ	1.1	-	4.1	3.6	3.0	2.2	1.7	2.5	3.6	4.9	4.8	1.8	3.4	2.8	4.6
ROTEC	-	4.8	4.7	4.7	2.6	-	4.6	-	-	4.5	-	-	4.4	-	-
SARAN	-	3.0	-	-	-	-	0.3	-	-	-	2.6	2.5	-	1.3	0.1
	3.4	2.1	-	-	-	-	-	-	-	-	-	3.5	0.3	2.9	0.7
SCHHA	4.3	2.8	4.2	0.9	-	-	-	2.5	5.1	1.0	3.3	0.2	0.2	-	0.2
SLAST	-	-	-	-	-	-	-	-	-	-	0.3	-	-	-	-
STOEN	-	-	2.2	2.6	-	5.5	-	0.7	-	1.5	1.9	1.8	-	4.5	4.9
	-	-	1.9	4.4	-	4.4	-	-	-	0.8	0.6	1.2	-	2.1	2.8
	-	-	2.2	3.8	-	5.7	-	0.3	-	-	-	2.3	-	4.1	4.8
STRJO	3.5	1.8	4.0	1.5	-	-	0.3	1.5	-	-	1.0	-	-	1.7	-
	4.0	4.1	3.2	1.5	-	1.4	0.3	0.3	0.3	0.8	1.1	-	-	-	0.4
	3.3	1.3	3.9	4.0	-	1.0	1.3	3.0	1.3	0.4	1.5	-	-	1.6	-
TEPIS	4.0	0.4	1.9	3.2	3.7	1.2	-	1.2	-	3.9	3.5	5.2	4.2	4.3	5.1
TRIMI	0.3	1.3	1.1	-	0.8	2.9	0.3	1.5	-	1.0	-	1.7	-	2.7	4.2
ZELZO	-	-	-	-	1.3	-	1.7	1.5	-	1.3	-	5.8	2.5	2.3	-
Sum	86.9	97.1	113.2	92.3	51.1	78.1	77.7	61.1	34.6	63.8	73.1	86.2	71.9	125.0	123.9

June	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
BERER	5.4	2.8	0.3	5.2	1.8	-	4.2	-	4.4	4.1	5.6	5.4	-	2.3	2.6
	5.6	1.2	1.3	5.6	2.1	-	4.4	-	3.8	5.7	5.7	5.7	-	2.8	1.3
	5.6	-	-	5.6	0.9	-	3.0	-	5.7	5.7	5.7	5.7	-	2.1	2.5
BREMA	-	-	-	-	-	-	2.6	-	1.0	-	4.4	0.8	-	0.5	-
BRIBE	-	-	-	-	-	-	2.5	1.8	0.8	-	5.1	3.6	-	0.3	1.5
	4.4	-	-	1.2	-	-	3.5	3.0	2.2	-	5.2	1.2	-	1.6	-
CASFL	0.3	1.8	3.0	-	-	5.4	1.1	-	1.0	3.9	6.5	6.5	4.5	-	1.8
	-	1.3	0.2	2.0	3.8	4.0	1.1	4.2	0.3	4.9	5.5	5.8	1.0	-	-
CRIST	0.5	4.3	2.8	6.2	6.2	6.2	6.2	-	6.2	6.2	6.2	6.2	6.2	3.7	4.5
	2.5	4.0	3.6	6.2	6.2	6.1	6.1	2.0	6.2	6.2	6.2	6.2	6.2	3.2	6.2
CSISZ	2.8	4.8	-	2.9	1.0	5.0	2.3	-	1.3	-	4.5	-	-	-	0.2
CURMA	3.4	-	-	-	-	0.9	0.7	3.1	-	-	4.3	1.5	1.7	1.1	3.0
ELTMA	1.8	-	-	3.3	6.2	3.0	3.1	4.8	1.1	5.7	6.3	4.0	1.0	-	-
GONRU	6.8	-	6.6	6.8	6.8	1.7	6.7	7.0	7.0	7.0	4.8	3.6	6.9	5.3	4.8
	1.4	-	2.6	3.2	6.9	3.3	5.5	7.0	5.2	3.3	7.0	2.4	7.0	6.8	5.5
GOVMI	4.6	2.0	-	2.6	4.6	4.4	5.7	-	1.2	-	-	-	3.2	-	1.1
HERCA	4.1	6.6	3.5	7.8	7.8	7.8	7.4	4.5	4.0	6.5	7.5	7.8	5.4	4.3	2.2
HINWO	-	-	-	0.9	-	0.9	-	1.3	-	-	4.8	-	3.9	-	-
IGAAN	2.9	3.4	1.4	4.1	3.9	3.3	4.8	0.6	1.5	6.1	3.6	5.1	2.3	1.9	-
	1.9	4.2	1.8	4.8	0.7	4.8	5.1	0.6	-	6.0	4.0	0.6	-	4.1	0.8
	1.3	0.5	-	-	-	1.8	0.1	-	0.3	3.6	1.5	3.3	-	-	-
	-	3.4	-	1.9	-	2.6	1.1	-	2.0	-	1.4	0.9	1.7	2.8	-
JONKA	4.7	2.2	-	3.6	-	2.4	3.5	-	1.9	5.8	5.8	5.8	-	4.7	-

KACJA	-	-	-	-	-	-	-	-	-	-	-	4.1	3.7	2.7	-
	5.9	1.4	-	4.9	6.0	6.0	5.5	-	0.3	1.5	6.0	6.0	6.0	6.0	5.4
	6.1	-	-	6.1	6.1	6.1	6.1	-	1.7	-	6.1	5.2	6.1	6.1	6.2
	6.1	-	-	6.1	6.1	6.1	5.5	-	1.5	-	6.1	6.1	6.1	6.1	6.1
KERST	11.1	9.6	10.2	11.6	10.5	11.6	11.1	11.4	11.4	8.9	5.4	-	11.2	8.6	11.0
MOLSI	-	-	-	-	-	-	-	-	-	-	4.4	-	4.5	-	-
	-	0.5	0.4	3.6	-	5.4	-	2.8	3.1	0.3	5.5	5.5	5.5	-	4.4
	-	-	4.2	-	4.3	-	0.3	0.3	-	-	4.3	4.3	4.3	0.3	4.4
	-	-	4.1	0.2	2.3	-	2.8	1.0	0.7	-	4.3	4.3	4.3	2.3	4.4
OTTMI	-	-	-	-	2.9	-	-	-	2.8	4.4	1.0	5.8	-	5.9	1.2
PERCZ	3.4	3.9	-	4.4	1.7	3.5	5.1	0.3	1.5	-	4.9	1.6	4.9	6.1	0.5
ROTEC	-	-	4.2	-	2.1	-	-	-	1.9	-	1.4	-	4.4	4.4	0.9
SARAN	1.1	-	3.9	4.3	7.1	-	-	3.8	4.3	-	-	4.1	4.1	4.6	0.7
	0.9	-	2.8	3.6	6.6	3.6	5.0	3.7	3.2	3.1	0.4	3.2	3.5	6.7	1.7
SCHHA	0.5	-	2.4	1.4	-	0.2	2.5	1.6	-	-	3.5	2.7	-	2.6	1.9
SLAST	1.6	-	-	1.8	3.5	2.6	3.6	-	-	-	2.7	4.3	4.9	2.2	2.4
STOEN	2.2	-	2.8	6.2	6.3	4.8	1.6	5.8	0.7	6.2	6.2	1.3	1.3	-	-
	2.7	-	2.7	6.2	6.2	5.1	2.2	5.8	1.4	6.2	6.2	1.9	1.4	-	-
	2.6	-	2.3	6.2	6.2	6.1	2.2	5.4	0.9	6.2	6.2	2.0	1.9	-	-
STRJO	-	-	-	-	-	-	-	-	-	-	1.4	2.0	-	-	-
	-	0.2	-	-	-	-	-	1.1	-	-	3.6	1.0	1.0	-	1.3
	-	-	-	-	1.3	-	-	-	-	-	2.3	3.5	-	-	2.7
TEPIS	5.1	2.8	-	5.1	-	2.3	3.8	-	-	3.0	4.8	5.1	1.9	3.3	-
TRIMI	4.4	1.6	-	0.3	6.1	4.0	2.6	-	3.2	-	5.2	4.1	5.3	4.4	4.3
ZELZO	4.9	7.3	-	2.8	-	3.3	-	0.3	2.3	6.7	7.3	6.3	0.3	6.4	-
Sum	118.6	69.8	67.1	148.7	144.2	134.3	140.6	83.2	98.0	127.2	210.8	166.5	137.6	126.2	97.5

3. Results (Meteors)

June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
BERER	10	9	4	4	13	2	7	1	-	-	-	19	-	13	17
	5	7	1	6	7	3	4	-	-	-	-	8	-	6	10
	6	8	-	1	5	-	4	1	-	-	-	5	-	6	4
BREMA	15	6	11	7	-	-	-	9	5	-	11	-	-	-	-
BRIBE	14	13	15	-	6	-	-	-	-	-	-	-	-	-	-
	15	11	13	-	-	-	-	13	3	-	-	-	1	9	2
CASFL	1	-	-	-	-	15	-	3	-	3	-	-	14	20	-
	3	-	-	7	-	6	-	5	-	5	1	-	9	13	-
CRIST	-	12	10	-	-	1	-	-	8	2	-	-	12	13	17
	1	19	12	1	6	8	-	-	-	-	-	-	-	-	25
CSISZ	1	-	3	-	-	-	-	-	-	7	9	1	-	-	-
CURMA	4	4	-	-	-	6	5	9	3	-	15	-	7	-	-
ELTMA	-	-	-	-	-	-	-	-	-	-	-	9	-	24	11
GONRU	30	25	21	19	-	-	13	-	-	21	16	3	15	30	5
	26	19	19	8	-	-	9	7	15	11	12	5	6	9	1
GOVMI	-	5	12	-	-	6	3	-	-	-	9	2	3	-	11
HERCA	4	9	11	11	-	15	8	16	18	14	23	11	17	21	15
HINWO	-	-	9	8	4	5	5	-	-	-	-	7	-	-	4
IGAAN	5	5	1	3	2	-	2	6	4	2	7	19	2	5	12
	7	5	2	7	1	4	5	8	4	-	-	7	9	-	11
	-	3	1	-	3	-	1	-	-	2	2	4	1	5	3
	2	-	3	4	2	1	-	-	1	11	10	8	1	4	22
JONKA	-	-	-	-	-	-	-	-	-	-	-	9	5	7	5
KACJA	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
	-	4	-	-	-	4	-	-	-	-	3	4	-	7	9
	-	4	-	-	-	7	-	4	-	4	-	-	-	19	29
	-	1	-	-	-	1	-	4	-	1	-	-	-	16	18
KERST	-	-	-	-	60	50	49	34	-	-	-	-	61	61	60
MOLSI	-	-	31	45	-	-	-	-	-	-	-	-	-	-	-
	-	-	13	19	9	3	12	-	-	12	-	7	2	3	2
	4	7	9	2	2	1	4	1	1	-	1	-	8	1	-
	16	13	11	8	1	1	9	1	-	-	4	2	6	4	-
OTTMI	12	7	11	10	4	4	10	-	-	-	13	5	4	-	-
PERCZ	4	-	9	7	11	5	3	10	11	17	18	3	6	8	19
ROTEC	-	15	15	10	5	-	11	-	-	7	-	-	10	-	-

SARAN	-	13	-	-	-	-	1	-	-	-	7	5	2	5	2
	10	6	-	-	-	-	-	-	-	-	-	8	2	8	4
SCHHA	9	8	10	1	-	-	-	8	8	2	8	1	1	-	1
SLAST	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
STOEN	-	-	13	14	-	27	-	2	-	2	3	5	-	27	21
	-	-	10	14	-	15	-	-	-	1	3	1	-	14	6
	-	-	8	8	-	25	-	1	-	-	-	6	-	24	21
STRJO	9	7	9	4	-	-	1	3	-	-	2	-	-	3	-
	12	7	10	3	-	2	1	1	1	1	2	-	-	-	1
	12	4	20	7	-	1	3	5	6	1	2	-	-	3	-
TEPIS	10	2	5	9	11	4	-	1	-	18	11	14	15	16	15
TRIMI	1	2	3	-	2	8	1	6	-	2	-	5	-	9	9
ZELZO	-	-	-	-	2	-	3	2	-	2	-	16	8	5	-
Sum	248	260	335	247	156	230	174	161	88	149	193	199	227	418	392

June	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
BERER	18	11	1	30	8	-	12	-	20	24	24	24	-	8	7
	5	2	2	7	2	-	8	-	7	11	28	15	-	7	4
	7	-	-	11	3	-	4	-	12	17	10	14	-	4	5
BREMA	-	-	-	-	-	-	12	-	2	-	16	5	-	3	-
BRIBE	-	-	-	-	-	-	10	7	1	-	15	7	-	4	3
	13	-	-	2	-	-	12	4	4	-	22	4	-	5	-
CASFL	1	8	5	-	-	13	2	-	2	14	26	17	8	-	5
	-	2	1	5	11	10	1	13	1	11	20	15	2	-	-
CRIST	1	7	12	19	19	15	14	-	22	17	18	22	9	13	10
	6	10	10	25	36	20	32	4	45	27	28	38	26	16	27
CSISZ	7	12	-	7	2	10	5	-	3	-	9	-	-	-	1
CURMA	13	-	-	-	-	1	2	7	-	-	13	4	10	2	11
ELTMA	7	-	-	7	15	9	11	13	5	24	15	9	3	-	-
GONRU	18	-	31	29	36	4	29	32	34	19	20	9	35	33	13
	4	-	8	8	18	6	22	21	12	10	16	6	20	24	17
GOVMI	15	6	-	4	12	18	14	-	3	-	-	-	16	-	5
HERCA	12	14	15	13	7	22	14	10	20	16	13	14	19	9	7
HINWO	-	-	-	3	-	1	-	3	-	-	16	-	11	-	-
IGAAN	6	8	4	11	10	12	17	1	3	25	15	14	9	3	-
	6	6	5	17	1	12	15	1	-	29	16	3	-	9	1
	3	4	-	-	-	3	1	-	1	6	4	8	-	-	-
	-	9	-	4	-	10	3	-	6	-	3	1	6	9	-
JONKA	11	5	-	7	-	6	8	-	3	24	20	13	-	10	-
KACJA	-	-	-	-	-	-	-	-	-	-	-	6	12	8	-
	1	1	-	8	13	8	9	-	1	5	16	15	10	7	8
	12	-	-	26	35	39	23	-	1	-	35	18	38	29	34
	16	-	-	13	20	24	9	-	1	-	23	24	17	14	14
KERST	65	72	81	87	78	94	85	99	87	49	15	-	82	61	86
MOLSI	-	-	-	-	-	-	-	-	-	-	33	-	58	-	-
	-	1	2	10	-	18	-	7	10	1	32	32	19	-	13
	-	-	4	-	2	-	1	1	-	-	6	9	7	1	4
	-	-	7	1	3	-	8	2	1	-	12	16	15	5	11
OTTMI	-	-	-	-	7	-	-	-	10	12	7	22	-	19	3
PERCZ	16	9	-	15	5	19	20	2	4	-	9	3	32	35	2
ROTEC	-	-	6	-	2	-	-	-	3	-	4	-	11	9	1
SARAN	3	-	13	9	12	-	-	3	6	-	-	11	9	16	2
	3	-	9	13	23	11	14	11	11	8	2	9	9	21	3
SCHHA	2	-	6	5	-	1	4	3	-	-	12	9	-	10	7
SLAST	3	-	-	6	15	6	10	-	-	-	20	20	27	7	7
STOEN	5	-	10	26	26	16	3	31	1	39	35	3	6	-	-
	4	-	7	29	16	20	7	22	3	31	32	3	2	-	-
	13	-	5	43	33	26	9	30	1	28	43	3	8	-	-
STRJO	-	-	-	-	-	-	-	-	-	-	5	5	-	-	-
	-	1	-	-	-	-	-	4	-	-	17	1	1	-	3
	-	-	-	-	2	-	-	-	-	-	17	17	-	-	16
TEPIS	14	11	-	23	-	14	10	-	-	19	33	16	5	5	-
TRIMI	8	4	-	1	15	15	7	-	5	-	11	14	20	12	15
ZELZO	4	3	-	13	-	13	-	1	4	28	13	18	1	11	-
Sum	322	206	244	537	487	496	467	332	355	494	799	516	563	429	345

At some time also the weather needs a rest. After March, April and May presented optimal conditions to the observers, the weather shifted to a lower gear in June and presented only mediocre observing conditions to central European observers. Farther to the south in Hungary, Italy and Portugal, the weather conditions remained good and presented twenty and more observing nights to many observers. Also our observers in Arizona and Australia enjoyed perfect conditions. With an overall total of 3,100 hours of effective observing time, we exceeded the result of 2010 by 50%. For the first time we managed to record more than 10,000 meteors in June. As meteor activity will rise in the following months, this year should become the first where we record more than 10,000 meteors each month.

In June 2011, we could win a second Portuguese observer for the IMO network. In the suburbs of Lisbon, Carlos Saraiva is operating the two Watec cameras RO1 and RO2 with 6 mm f/0.75 Panasonic lens. His observing site suffers from strong light pollution, which is why his meteor counts are not yet the best, but with some optimizations this may still improve.

Whereas June marks the start of winter with long nights in Australia, the nights are correspondingly short in the northern hemisphere. That cannot be compensated by the slightly improving hourly meteor counts in June. In northern Germany there are still a few observing hours left each night, but our observer in Finland has to pause completely from mid-May to early August. Also with respect to meteor showers, June is rather boring. Only the June Bootids present exceptional activity every now and then – but not in 2011. After uploading all June data, the online flux density profile (figure 1) shows a uniform activity profile at a very low level. The stream did obviously not stand out of the sporadic background.

At this point it shall be mentioned that Geert Barentsen implemented a few new functions in the online tool. Now you can select the shower from the IMO working list, for example, and the flux tool selects automatically the right activity interval. Geert has also implemented a new binning algorithm for the observations. Beside the minimum and maximum interval length, you can now not only specify the envisioned number of meteors per bin, but alternatively also the effective collection area.

The philosophy is slightly different here: When specifying the meteor count it is assumed that at least x shower meteors are required to estimate the flux density with sufficient accuracy. The relative error is inverse proportional to the root of the meteor count. Thus, a fixed number of meteors per bin yields the same relative error for each data point. In case of low activity as for the June Bootids, individual intervals may get quite long, and during high activity the bin size is very small.

Now the question is whether a fixed relative error is the right criterion? Whether the flux density is 90 or 100 seems to be more relevant than whether it is 0.9 or 1.0. If the bin size is defined by the effective collection area, it is specified, how long has to be observed under normalized conditions to yield a statistically significant measurement. That approach is independent of the number of shower meteors in each interval. At low rates, the intervals are not getting too long and the relative error is increasing, whereas at high rates the temporal resolution is lower.

At this time it is still open which of the two methods gives better results. In case of the June Bootids and given the same number of intervals (12 bins with 9 meteors resp. 150,000 km^2*h per bin), it seems that the second method yields slightly less scatter. Maybe even the combination of both methods is the best, i.e. that for each bin at least a given meteor count x or effective collection area y has to be obtained.

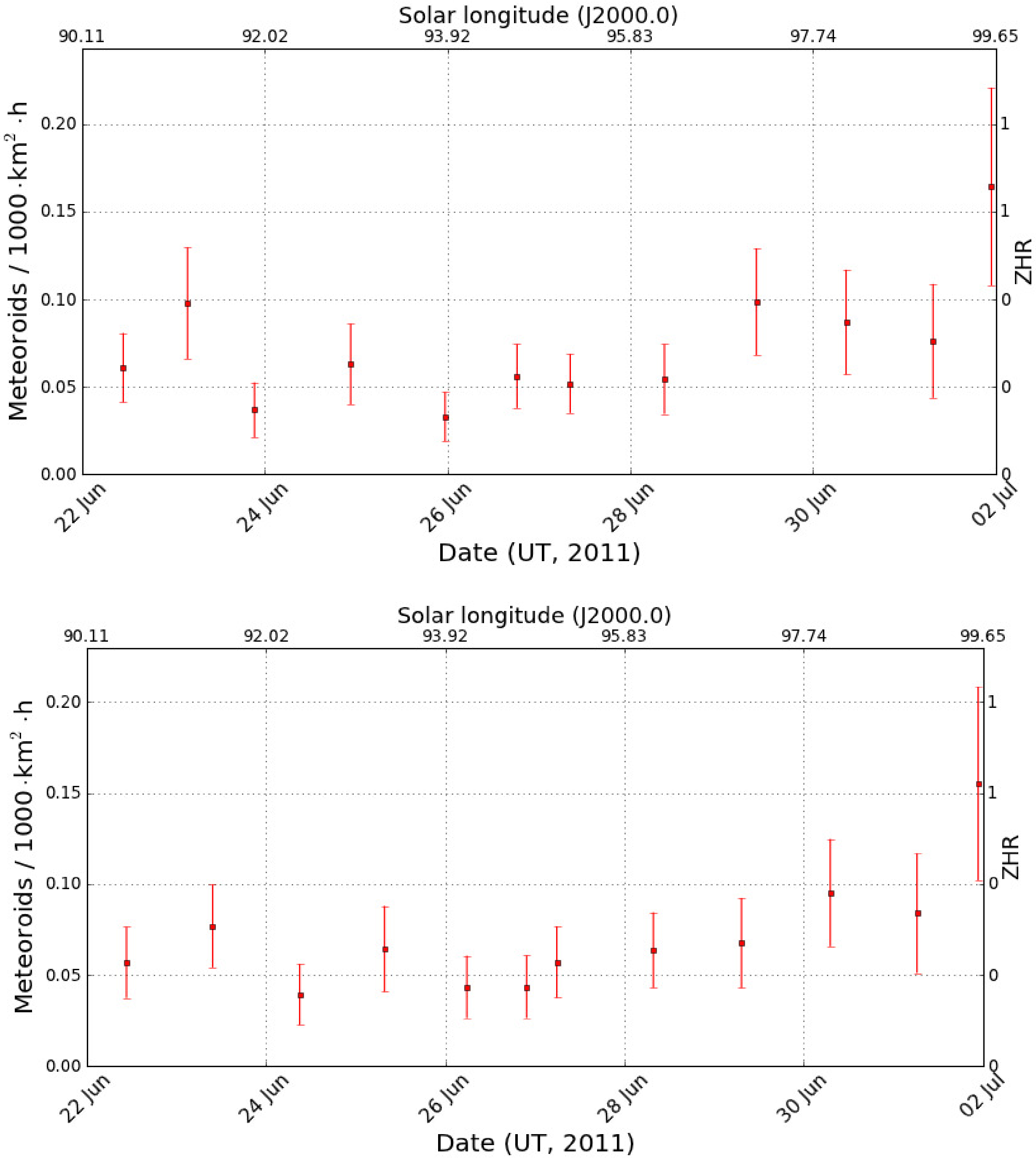

Figure 1: *Online flux density profile of the June Bootids with binning by meteor count (upper graph) resp. effective collection area (lower graph).*